

Amendments to the Claims

The following listing of claims replaces all prior versions of the claims in the Application.

Listing of Claims

- 1 (Withdrawn). An isolated nucleic acid selected from the group consisting of:
- a. SEQ ID NO:1, SEQ ID NO:2, or SEQ ID NO:3;
 - b. a nucleic acid sequence encoding amino acid SEQ ID NO:4, SEQ ID NO:5, or SEQ ID NO:6;
 - c. a complementary nucleic acid sequence of SEQ ID NO:1, SEQ ID NO:2, or SEQ ID NO:3; and
 - d. a nucleic acid sequence comprising at least 50 nucleotides which hybridizes under stringent conditions to SEQ ID NO:1, SEQ ID NO:2, or SEQ ID NO:3.
- 2 (Withdrawn). The isolated nucleic acid of claim 1 which is DNA.
- 3 (Withdrawn). The isolated nucleic acid of claim 1 which is RNA.
- 4 (Withdrawn). An expression vector containing the nucleic acid of claim 1.
- 5 (Withdrawn). A host cell containing the vector of claim 4.
- 6 (Withdrawn). The host cell of claim 5 which is a eukaryotic cell.
- 7 (Withdrawn). The host cell of claim 6 which is a human cell.
- 8 (Withdrawn). The host cell of claim 5 which is a prokaryotic cell.

9 (Withdrawn). Isolated DNA or RNA comprising at least 50 consecutive nucleotides of:

- a. SEQ ID NO:1, SEQ ID NO:2, or SEQ ID NO:3; or
- b. a complementary nucleic acid sequence of: SEQ ID NO:1, SEQ ID NO:2, or SEQ ID NO:3.

10 (Withdrawn). An isolated nucleic acid which hybridizes to the DNA or RNA of claim 9 under high stringency conditions.

11 (Withdrawn). An expression vector containing the DNA or RNA of claim 9.

12 (Withdrawn). A host cell containing the vector of claim 11.

13 (Withdrawn). The host cell of claim 5 which is a eukaryotic cell.

14 (Withdrawn). The host cell of claim 6 which is a human cell.

15 (Withdrawn). The host cell of claim 5 which is a prokaryotic cell.

16 (Currently amended). An isolated polypeptide comprising an amino acid sequence encoded by a nucleotide sequence comprising at least 98% sequence identity to the nucleotide sequence of SEQ ID NO: 2 comprising SEQ ID NO:4, SEQ ID NO:5, or SEQ ID NO:6.

17 (Currently amended). An isolated polypeptide comprising an amino acid sequence encoded by 50 or more consecutive nucleotides of SEQ ID NO:1, SEQ ID NO:2, or SEQ ID NO:3.

18 (Currently amended). An isolated polypeptide comprising 20 or more contiguous amino acids from the amino acid sequence of SEQ ID NO: 5 having 80% or greater sequence identity to the amino acid sequence according to claim 16.

19 (Currently amended). The polypeptide of claim 18 comprising the amino acid sequence of SEQ ID NO: 5. An amino acid sequence comprising at least 20 or more consecutive residues of a sequence according to claim 16.

20 (Withdrawn). A polynucleotide comprising at least 15 consecutive nucleotides of any of the nucleic acids of Table 10, wherein the 15 consecutive nucleotides include a single nucleotide polymorphic site selected from Table 10.

21 (Withdrawn). An isolated variant of SEQ ID NO:1, SEQ ID NO:2, or SEQ ID NO:3, wherein the variation contains one or more SNPs from Table 10.

22 (Cancelled).

23 (Currently amended). An isolated antibody or antibody fragment thereof which specifically binds to a polypeptide of an amino acid sequence of claim 16.

24 (Currently amended). An isolated antibody or antibody fragment thereof which specifically binds to a polypeptide an amino acid sequence of claim 17.

25 (Currently amended). An isolated antibody or antibody fragment thereof which specifically binds to a polypeptide of claim 18.

26 (Currently amended). An isolated antibody or antibody fragment thereof which specifically binds to a polypeptide an amino acid sequence of claim 19.

27 (Withdrawn). An isolated nucleic acid fragment comprising at least 15 consecutive nucleotide bases of BAC RPCI 11-1098L22 of SEQ ID NO:7 (FIGS. 20A-20G).

28 (Withdrawn). A method of identifying and obtaining a human chromosome 20p13-p12 gene or a homolog in a mammal, comprising the steps of:

- a. preparing a sample of cells or tissue of the mammal;
- b. probing the tissue or cell with all or a portion of a human chromosome 20p13-p12 nucleic acid under conditions wherein hybridized DNA can be produced;
- c. identifying the hybridized DNA; and
- d. cloning and sequencing the hybridized DNA to obtain and identify the human chromosome 20p13-p12 gene or homolog in the mammal, wherein, the human chromosome 20p13-p12 gene or homolog is obtained.

29 (Withdrawn). A method of treating a chromosome 20 disorder comprising administering a molecule which binds an endogenous analog of Gene 216.

30 (Withdrawn). A method of treating a chromosome 20 disorder comprising administering a compound which is an agonist or an antagonist of a polynucleotide selected from the group consisting of: SEQ ID NO:1, SEQ ID NO:2, or SEQ ID NO:3, a variant and fragment thereof.

31 (Withdrawn). The method of claim 29 wherein the antagonist is an antibody or an antibody fragment.
32 (New). The antibody of claim 23 which is monoclonal.

33 (New). The antibody or fragment of claim 23 which is a polyclonal antibody, an anti-idiotypic antibody, a chimeric antibody, a Fab fragment, a F(ab)₂ fragment or a labeled antibody.

34 (New). The antibody of claim 24 which is monoclonal.

35 (New). The antibody or fragment of claim 24 which is a polyclonal antibody, an anti-idiotypic antibody, a chimeric antibody, a Fab fragment, a F(ab)₂ fragment or a labeled antibody.

36 (New). The antibody of claim 25 which is monoclonal.

37 (New). The antibody or fragment of claim 25 which is a polyclonal antibody, an anti-idiotypic antibody, a chimeric antibody, a Fab fragment, a F(ab)₂ fragment or a labeled antibody.

38 (New). The antibody of claim 26 which is monoclonal.

39 (New). The antibody or fragment of claim 26 which is a polyclonal antibody, an anti-idiotypic antibody, a chimeric antibody, a Fab fragment, a F(ab)₂ fragment or a labeled antibody.

40 (New). The antibody or fragment of claim 23 complexed with said polypeptide.

41 (New). The antibody or fragment of claim 24 complexed with said polypeptide.

42 (New). The antibody or fragment of claim 25 complexed with said polypeptide.

43 (New). The antibody or fragment of claim 26 complexed with said polypeptide.

44 (New). A pharmaceutical composition comprising the antibody or fragment of claim 23 and a pharmaceutically acceptable carrier.

45 (New). The pharmaceutical composition of claim 44 wherein the antibody is monoclonal.

46 (New). A pharmaceutical composition comprising the antibody or fragment of claim 24 and a pharmaceutically acceptable carrier.

47 (New). The pharmaceutical composition of claim 46 wherein the antibody is monoclonal.

48 (New). A pharmaceutical composition comprising the antibody or fragment of claim 25 and a pharmaceutically acceptable carrier.

49 (New). The pharmaceutical composition of claim 48 wherein the antibody is monoclonal.

50 (New). A pharmaceutical composition comprising the antibody or fragment of claim 26 and a pharmaceutically acceptable carrier.

51 (New). The pharmaceutical composition of claim 50 wherein the antibody is monoclonal.

52 (New). The antibody of claim 23 which is bound to a solid support.

53 (New). The antibody of claim 24 which is bound to a solid support.

54 (New). The antibody of claim 25 which is bound to a solid support.

55 (New). The antibody of claim 26 which is bound to a solid support.

56 (New). The antibody of claim 55 bound to said polypeptide.

57 (New). The antibody of claim 56 bound to said polypeptide.

58 (New). The antibody of claim 57 bound to said polypeptide.

59 (New). The antibody of claim 58 bound to said polypeptide.

60 (New). The polypeptide of claim 16 which is crystalline.

61 (New). The polypeptide of claim 17 which is crystalline.

62 (New). The polypeptide of claim 18 which is crystalline.

63 (New). A monoclonal antibody which binds specifically to a polypeptide comprising the amino acid sequence of SEQ ID NO: 5.

64 (New). A pharmaceutical composition comprising the antibody of claim 63 and a pharmaceutically acceptable carrier.